

INTERCOLLEGIATE BROADCASTING
SYSTEM
Engineering Department
Washington, D. C.

September 30, 1949

From : Engineering Director File: T9.0
To : Station Managers
Attention: Chief Engineers
Subject : Engineering Data Urgently Needed by IBS for Re-
presenting Campus Stations before the F. C. C.

Since the date of filing our brief before the FCC, the Commission has contacted us to furnish some accurate data on the technical plants at our stations. As you know, we have already requested field strength data from all of you who could furnish it, and may I point out to those of you who have not already done so, it is still not too late to furnish this data per Engineering Note No. 18 as we will need it at the hearings to support our demand for 150uv/meter field strength. Don't hesitate to send in the data if the readings happen to be in excess of the present limitations. As you can readily see, the more data we have, the stronger will be our case. The Commission may be very meticulous in some instances, but from what we have already been asked, they seem to want detailed data on many points. Our technical files on the stations in IBS is definitely not up to date, as we have not tried to burden you with numerous requests for data once membership status has been granted. But now we are faced with the problem of properly representing all our stations before the FCC, and frankly we are in an embarrassing position. According, we are enclosing with this memorandum a Technical Information Questionnaire which should be filled out by your engineering staff and returned to our Washington offices. Your immediate cooperation will expedite compilation of the data the FCC wishes to know. If these questionnaires are returned by October 21st it will be appreciated. In some instances, it may be impossible to answer all questions fully, but in order not to delay returning this questionnaire, will you please fill out as much information as is presently known. Also, do not waste time in making formal drawings, free hand sketches are entirely satisfactory.

At this time, may I express our thanks to the cooperation that has been extended to this department from many of the stations in answer to our past requests.

Enclosed with this memorandum, you will find a copy of the text of the IBS proposal of new rules to govern all the stations. Your particular attention should be directed to sections 3.803 and 3.851-3.857 which set forth the technical

over

operation of the station. The most controversial issue has been the limit of radiation which has been specified. As you know we have been trying for some time to obtain field strength data from our stations in order to arrive at a limit of radiation which would be most acceptable to the majority and still be low enough to stand a chance of acceptance by the FCC. From the data that has so far been received, which represents a minority of the stations in IBS, it has been observed that with an entirely underground system (i.e. a.c. lines and r.f. lines underground throughout the campus) satisfactory operation can be achieved even under the old 15uv/meter at lambda over 2 rule. However, a substantial percentage of the stations must in at least one place utilize overhead r. f and/or overhead a.c. conductors in the system. It is in such instances that the radiation limit must be raised. With utilization of good engineering practices to reduce standing waves etc., it had been observed that a station can put an excellent signal into the buildings and just come within the proposed 150uv/meter rule. You will note that the wording has been composed so as to define the distance away from the campus property and also from the conductors comprising the r. f. transmission system.

Herbert B. Barlow, Jr.
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HB: /cbp